

## Synaptotagmin Polyclonal Antibody

<b>Catalog No :</b>	YT4484
<b>Reactivity :</b>	Human;Mouse;Rat
<b>Applications :</b>	WB;IHC;IF;ELISA
<b>Target :</b>	Synaptotagmin 1/2
<b>Fields :</b>	>>Synaptic vesicle cycle
<b>Gene Name :</b>	SYT1/SYT2
<b>Protein Name :</b>	Synaptotagmin-1/2
<b>Human Gene Id :</b>	6857/127833
<b>Human Swiss Prot No :</b>	P21579/Q8N9I0
<b>Mouse Gene Id :</b>	20979/20980
<b>Rat Gene Id :</b>	25716/24805
<b>Rat Swiss Prot No :</b>	P21707/P29101
<b>Immunogen :</b>	The antiserum was produced against synthesized peptide derived from human Synaptotagmin. AA range:276-325
<b>Specificity :</b>	Synaptotagmin Polyclonal Antibody detects endogenous levels of Synaptotagmin protein.
<b>Formulation :</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source :</b>	Polyclonal, Rabbit,IgG
<b>Dilution :</b>	WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:20000.. IF 1:50-200
<b>Purification :</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

**Concentration :** 1 mg/ml

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**Storage Stability :** -15°C to -25°C/1 year(Do not lower than -25°C)

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**Observed Band :** 50kD

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**Background :** The synaptotagmins are integral membrane proteins of synaptic vesicles thought to serve as Ca(2+) sensors in the process of vesicular trafficking and exocytosis. Calcium binding to synaptotagmin-1 participates in triggering neurotransmitter release at the synapse (Fernandez-Chacon et al., 2001 [PubMed 11242035]).[supplied by OMIM, Jul 2010],

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**Function :** cofactor: Binds 3 calcium ions per subunit. The ions are bound to the C2 domains., domain: The first C2 domain mediates Ca(2+)-dependent phospholipid binding., domain: The second C2 domain mediates interaction with SV2A and STN2., function: May have a regulatory role in the membrane interactions during trafficking of synaptic vesicles at the active zone of the synapse. It binds acidic phospholipids with a specificity that requires the presence of both an acidic head group and a diacyl backbone. A Ca(2+)-dependent interaction between synaptotagmin and putative receptors for activated protein kinase C has also been reported. It can bind to at least three additional proteins in a Ca(2+)-independent manner; these are neurexins, syntaxin and AP2., similarity: Belongs to the synaptotagmin family., similarity: Contains 2 C2 domains., subcellular location: Synaptic vesicles and chromaffin granules., subunit: H

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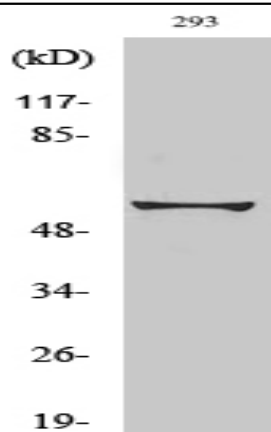
**Subcellular Location :** Cytoplasmic vesicle, secretory vesicle membrane ; Single-pass membrane protein . Cytoplasmic vesicle, secretory vesicle, synaptic vesicle membrane ; Single-pass membrane protein . Cytoplasmic vesicle, secretory vesicle, chromaffin granule membrane ; Single-pass membrane protein . Cytoplasm .

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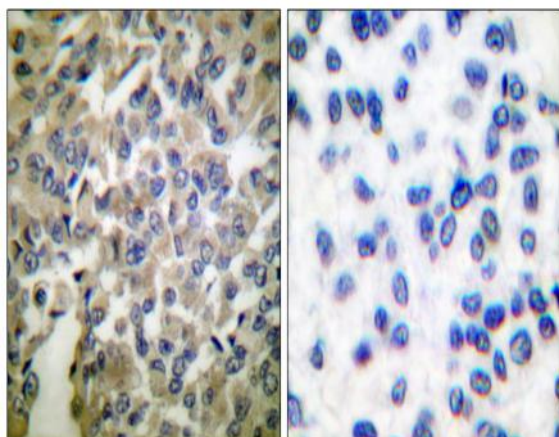
**Expression :** Expressed in melanocytes (PubMed:23999003).

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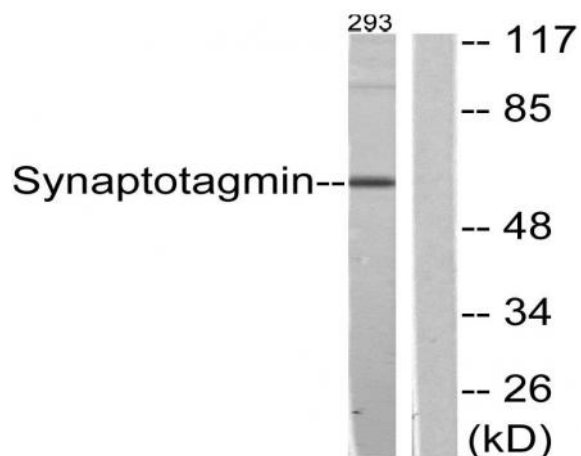
## Products Images



Western Blot analysis of various cells using Synaptotagmin Polyclonal Antibody diluted at 1:2000



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma tissue, using Synaptotagmin Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from 293 cells, treated with Forskolin 40nM 30', using Synaptotagmin Antibody. The lane on the right is blocked with the synthesized peptide.